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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,201	08/31/2000	Anton Ephanov	0655/62549	2659

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EXAMINER

CUNNINGHAM, GREGORY F

ART UNIT

PAPER NUMBER

2676

DATE MAILED: 03/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,201

Applicant(s)

EPHANOV, ANTON

Examiner

Greg Cunningham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This action is responsive to communications of application filed 08/31/2000.
2. The disposition of the claims is as follows: claims 1-16 are pending in the application. Claims 1, 5, 7, 11, and 13 are independent claims.
3. The group and/or Art Unit location of your application has changed. To aid in the correlation of any papers for this application, all further correspondence should be directed to Group Art Unit 2676 (effective 10/02). Please be sure to use the most current art unit number on all correspondence to help us route your case and respond to you in a timely fashion.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- A. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 2 of claim 4, "calling a geometry" can be interpreted as naming a geometry or retrieving a geometry or possible the applicant's intention was for -culling a geometry--.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-3, 5-9, and 11-15 are rejected under 35 U.S.C. 102(a) as being disclosed by Brockway et al., (U.S. Patent Number 6,456,288 B1), hereafter Brockway.

A. Brockway discloses claim 1 in col. 11, lns. 10-25 at “(20) In a preferred embodiment of the present invention, process Build Color Imagery Texture 45 builds a clip stack. A clip stack is a multi-resolution data structure comprising the resolution sets necessary for rendering an image. The clip stack is a data structure compatible with the Onyx2 computer system shown in FIG. 1. The clip stack contains a copy of imagery data at low resolution, and a copy at successively higher resolutions. In a preferred embodiment, high-resolution and low-resolution imagery, for example, the present invention builds nineteen resolution levels for an image, for example, input source imagery may be input at five-meter and forty-meter resolution. In a preferred embodiment, for example, the forty-meter imagery data is stored in resolution level five and the five-meter imagery data is stored in resolution level two. The present invention produces resolution level one, which is higher resolution than the original source imagery data.” (A method of simulating clip texturing, comprising: providing a clip stack of a portion of a texture image, the clip stack having ... of increasingly reduced resolution); and in col. 4, ln. 63 – col. 5, ln. 3 at “The present invention, for example, builds a one-meter resolution image in the clip map from high-resolution geotypical textures and then down samples that image to create lower-resolution images at two meters, four meters, eight meters, etc. The present invention continues generation of reduced-resolution data sets until it has generated and placed the geotypical texture

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in every resolution level of the clip map.” (rendering a geometry formed of at least one graphic primitive, using one of the stacks of images generated).

B. Brockway discloses claim 2 in col. 10, lns. 45-52 at “(17) Process Render with Vega 35 inputs Vega Regions 66 and Vega Clip Objects 67 and 68. The clip objects associate database portions or files in the database with a particular image. The ADF file defines the regions and clip objects. Vega associates files in the database with an image. The clip objects indicate which files use particular source imagery or SPLOT imagery. Thus Vega utilizes the Vega regions and Vega Clip objects to render an image in real-time.” (further comprising generating for each stack of images, an object containing said data representing the plurality of correlated images of increasingly reduced resolution).

C. Brockway discloses claim 3 in col. 13, lns. 35-45 at “(33) Turning now to FIG. 7, process Build Structure 43 inputs Base Contour Geometry (highest level of Detail) 140 localizes 142 the data so that the coordinates for each tile are local to the center of the tile, instead of all tile coordinates being relative to one common origin and stores the localized data in Localized Contour Geometry 144 (highest level of detail). Process Build Structure 43 inputs Base Contour Geometry (Lower Levels of Detail) 141 localizes 143 Base Contour Geometry 141 and stores the localized data in Localized Contour Geometry (Lower Levels of Detail) 145.” (method as recited in claim 2, wherein each said object further contains information identifying a location of a center of the portion of the texture image).

D. Per independent claim 5 and dependent claim 6, these are a method directed to a combination of method and apparatus hardware for performing the method of independent claim 1, and therefore is rejected to independent claim 1.

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E. Per independent claims 7 and 13 and dependent claims 8-9 and 14-15 these are directed to a computer readable medium and device apparatus, respectively, for performing the method of independent claim 1 and dependent claims 2-3, respectively, and therefore are identically rejected to independent claim 1 and dependent claims 2-3.

F. Per independent claim 11 and dependent claim 12, these are directed to a computer readable medium for performing the method of independent claim 5 and dependent claim 6, respectively, and therefore are rejected to independent claim 5 and dependent claim 6.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 10, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockway as applied to claim 1 above, and further in view of Nehme, (U.S. Patent Number 6,304,271).

A. Although Brockway discloses claim 1 supra, he does not appear to disclose claim 4, “calling a geometry, selecting one of the stacks of images, determining whether a bounding box which defines bounds of the geometry is covered by a bounding box which define bounds of the selected stack of images, if the bounding box of ... and repeating the determining, if the bounding box of the geometry is ... using the selected stack of images”, but Nehme does in col. 10, lns. 4-27 at “(38) The clip stack is initialized with the top-most screen bounding box. When

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no crop region is on the stack, the main window coordinates are the top-most window in a windows environment. The renderer 404 makes an intersection with the screen coordinates for the crop region and the top-most coordinates from the stack and then pushes the crop region screen coordinates on the clip stack 451. In response to this push, the clip region is set in the operating system 220. While the crop region screen coordinates are temporarily stored on the clip stack 451, the image (502) sends a "draw image" call to graphics 423.

(39) The "draw image" call includes the image's (502) bounding box, which is transformed to screen coordinates prior to rendering the cropped image. To transform the bounding box, the image 502 sends the bounding box coordinates to the renderer 404 via graphics 423. The renderer 404 applies the same transform it applied to the crop region, as shown in the process block 437. The process 437 returns screen coordinates for the image's bounding box. The renderer 404 asks the operating system 220 to draw the image to the previously set crop region. The operating system 220, having previously received the transformed crop region, paints the image 502 where it overlaps the transformed bounding box."

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply simulating texture using clip stacks disclosed by Brockway in combination with clip stacks using a bounding box disclosed by Nehme, and motivated to combine the teachings because it would provide more efficient image cropping functionality for use in zooming as revealed in col. 1, lines 61-63 of Nehme.

B. Per dependent claims 10 and 16, these are directed to a computer readable medium and device apparatus for performing the method of dependent claim 4 and therefore are rejected to dependent claim 4.

Responses

9. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires to fax a response, (703) 308-9051 may be used for formal communications or (703) 308-6606 for informal or draft communications.

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Inquiries

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Cunningham whose telephone number is (703) 308-6109.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached on (703) 308-6829.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

D. F. Cunningham

gfc

March 6, 2003

Matthew C. Bella

**MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**